



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,773	01/14/2004	Tomoaki Endo	03500.013745.1	2334
5514 7590 08/18/2010 FITZPATRICK CELLA HARPER & SCINTO 1290 Avenue of the Americas NEW YORK, NY 10104-3800				
EXAMINER				
WASHINGTON, JAMARES				
ART UNIT		PAPER NUMBER		
2625				
MAIL DATE		DELIVERY MODE		
08/18/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/756,773

Applicant(s)

ENDO ET AL.

Examiner

JAMARES WASHINGTON

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 69-91 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 69-91 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SI/220)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

Amendments and response received 01 June 2010 have been entered. Claims 69-91 are currently pending in this application. Claims 69, 70, 79, 80, 89 and 90 have been amended. Amendments and response are addressed hereinbelow.

Claim Objections

1. Claim 80 is objected to because of the following informalities:

“and wherein the method distinguishably displays on a display unit the job attribute range on the user” should read “and wherein the method distinguishably displays on a display unit the job attribute range on the user interface”. Appropriate correction is required.

Claim Rejections – 35 USC § 112

In light of the amendments to the claimed subject matter, Examiner hereby withdraws previous grounds of rejection.

Claim Rejections – 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 69-71, 73, 75-81, 83 and 85-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yousef R. Yacoub (6552813 B2) in view of John D. Hower, Jr. (US 5467434).

Regarding claim 69, Yacoub discloses an information processing apparatus (Fig. 5 numeral 600 client station) for controlling via a communication medium (Fig. 5 numeral 650 network) a peripheral (Fig. 5 numeral 660 or 670, printers) that processes a job, which executes a predetermined service, the apparatus comprising:

an obtaining unit adapted to obtain (Fig. 5 numeral 610 virtual printer via numeral 620 network interface), via the communication medium (Fig. 5 network 650, communication medium), function information indicating plural values executable by the peripheral ("Virtual

printer 610 receives other data, from the server 680 or a database in client 600, such as the capabilities of the printers so that the virtual printer can find the most appropriate printer, one that complies with the user's print job preferences" at Col. 11 line 46. Information regarding the capabilities of the printers reads on information indicating plural setting values as each function has to be given a value indicating it's capability to perform or a value indicating the function cannot be performed);

a display unit (Fig. 5 numeral 640 user interface) adapted to display a user interface provided in a control program for controlling the peripheral based on the function information obtained by the obtaining unit (Col. 11 lines 25-28; Col. 11 line 31-36 wherein the preferences selected by the user are sent to the virtual printer which "controls" the "appropriate" printer to output the preferences selected. Col. 11 lines 3-6 wherein software (a control program) manages hardware within the system);

an inhibition unit (Fig. 5 numeral 610 virtual printer).

Yacoub fails to explicitly disclose an issuance unit adapted to issue a job and a reference pointer indicating a reference to data to be processed using the plural setting values. Yacoub does however disclose that print jobs are provided with (i) plural setting values set via the user interface displayed by the display unit, the plural setting values including a value of a first attribute and a value of a second attribute different from the first attribute (Col. 6 lines 50-54).

Hower, Jr. et al, in the same field of endeavor of directing print jobs to the printing device which best fits the parameters of the print job or inhibiting the issuance of the print job otherwise (Col. 7 lines 4-24), teaches an issuance unit adapted to issue a job (Fig. 2 numeral 15-1, client which comprises a combination examiner for determining whether a job will be issued to a

respective print device) and a reference pointer indicating a reference to data to be processed using the plural setting values (Col. 7 lines 25-32; job ticket).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the information processing apparatus as disclosed by Yacoub comprising an obtaining unit, a display unit and an inhibition unit to utilize the issuance unit adapted to issue a job and the reference pointer indicating a reference to data to be processed using the plural setting values as taught by Hower, Jr. et al to make printing more efficient by providing a means for determining whether to issue a print job to a given printing apparatus when combinations of print job selections are available at a given printer having a predetermined set of printer properties and identifying the location of the print job to be sent to the given printing apparatus.

Yacoub fails to disclose the inhibition unit adapted to, if the plural setting values of the job are determined not to satisfy a predetermined condition related to the plural values indicated by the function information obtained by the obtaining unit, inhibit issuance of the job by the issuance unit.

Hower, Jr. et al teaches if the plural setting values of the job are determined not to satisfy a predetermined condition related to the plural values indicated by the function information obtained by the obtaining unit, inhibit issuance of the job, wherein, if setting of the value of the first attribute inhibits setting of the value of the second attribute, the inhibition unit determines that the job does not satisfy the predetermined condition provided with the plural setting values including the values of the first and second attributes (Col. 7 lines 32-41, wherein combinations of print job settings are compared to determine if the combination is permissible).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the inhibition unit as disclosed by Yacoub to utilize the teachings of Hower, Jr. et al wherein if plural setting values of the job are determined not to satisfy a predetermined condition related to the plural values indicated by function information, inhibit issuance of the job wherein, if setting of the value of the first attribute inhibits setting of the value of the second attribute, the inhibition unit determines that the job does not satisfy the predetermined condition provided with the plural setting values including the values of the first and second attributes to aid in curing impermissible choices and help users find alternative printing choices to speed the printing process.

Yacoub fails to explicitly disclose wherein the issuance unit issues the job provided with the reference pointer indicating the reference to data in an external apparatus, without downloading the data to the information processing apparatus.

Hower, Jr. et al teaches the issuance unit issues the job provided with the reference pointer indicating the reference to data in an external apparatus, without downloading the data to the information processing apparatus (Fig. 2 wherein the client (15-1) provides a job ticket of the print jobs in the document directory to the server's (25) print queue to be issued to the printer without downloading the document to the client machine).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the information processing apparatus as disclosed by Yacoub comprising an obtaining unit, a display unit and an inhibition unit to utilize the teachings of Hower, Jr. et al wherein an issuance unit issues the job provided with the reference pointer indicating the reference to data in an external apparatus, without downloading the data to the information

processing apparatus to allow for a more efficient printing process by eliminating unnecessary document transmission.

Regarding claim 70, Yacoub discloses an information processing apparatus according to Claim 69, wherein the function information obtained by the obtaining unit includes information indicating a job attribute range executable by the peripheral ("... speed can be variable and have many values from which the user can choose, such as slow, slower, fast, fastest or medium" Col. 5 lines 15. This indicates a "range" of one of the attributes of the printer), and wherein the display unit distinguishably displays the job attribute range on the user interface (Col. 11 lines 25-28; as mentioned before, the range of speed is an attribute that can be selected on the interface).

Regarding claim 71, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains information indicating a function setting range executable by the peripheral ("... speed can be variable and have many values from which the user can choose, such as slow, slower, fast, fastest or medium" Col. 5 lines 15. This indicates a "range" of one of the attributes of the printer).

Regarding claim 73, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains information indicating a function selectable in the peripheral ("Virtual printer 610 receives other data, from the server 680 or a database in client 600, such as the capabilities of the printers..." Col. 11 line 46).

Regarding claim 75, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains from the peripheral an attribute list indicating functions corresponding to one of a physical device control program, a logical device control program, a resource control program of the peripheral and a coordinate control program for coordination thereof ("Further, while some printers are capable of understanding one of the printer languages such as either Postscript or PCL but not both, a further print job preference may be the printer language which either the software/application used in generating the print job" at Col. 8 line 26. Indicating an attribute sent to the "virtual printer" for making determinations can include the language supported by the peripheral which is readable on a logical device control program; Fig. 4 shows the layout of a typical office suite having both laser and inkjet printing devices, indicating information obtained from the peripheral devices will include the type of printer which would be controlled by the client station. Therefore, physical device control programs would need to be acquired in order to print from both laser and inkjet printers located in the office setting).

Regarding claim 76, Yacoub discloses an information processing apparatus according to Claim 75, wherein the physical device control program includes at least one of a scanner control program that controls a scanner engine of the peripheral, a laser beam printer control program that controls a laser beam printer engine of the peripheral, and an ink jet printer control program that controls an ink jet printer engine of the peripheral (see rejection of claim 75; Suggesting laser and inkjet printers are controlled).

Regarding claim 77, discloses an information processing apparatus according to Claim 75, wherein the logical device control program includes at least one of a print job control program that controls a laser beam printer control program, a print job control program that controls an ink jet printer control program, a print job control program that controls the laser beam printer control program and the ink jet printer control program, a scan job control program that controls a scanner control program, a copy job control program that controls the scanner control program and the laser beam printer control program, and a copy job control program that controls the scanner control program and the ink jet printer control program (see rejection of claim 75 wherein print job control programs, using either PCL or Postscript languages, are utilized to control the laser and inkjet printers).

Regarding claim 78, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains the function information from the peripheral (Col. 5 lines 41-44 wherein the virtual printer will query...all printers present in...an office suite...").

Regarding claim 79, Yacoub discloses an information processing method for controlling via a communication medium a peripheral that processes a job which executes a predetermined service (see rejection of claim 69, apparatus implementing the method), the method comprising:

an obtaining step of obtaining, via the communication medium, function information indicating plural values executable by the peripheral (see rejection of claim 69);

a displaying step of displaying a user interface provided in a control program for controlling the peripheral based on the function information obtained in the obtaining step (see rejection of claim 69);

an issuance step of issuing a job provided with (i) plural setting values set via the user interface displayed by a display unit, the plural setting values including a value of a first attribute and a value of a second attribute different from the first attribute, and (ii) a reference pointer indicating a reference to data to be processed using the plural setting values (see rejection of claim 69); and

an inhibition step of the plural setting values of the job are determined not to satisfy a predetermined condition related to the plural values indicated by the function information obtained in the obtaining step, inhibiting issuance of the job in the issuance step (see rejection of claim 69),

wherein, if setting of the value of the first attribute inhibits setting of the value of the second attribute the inhibiting step includes determining that the job does not satisfy the predetermined condition, of provided with the plural setting values including the values of the first and second attributes (see rejection of claim 69);

wherein the job issued in the issuance step is provided with the reference pointer indicating the reference to data in an external apparatus, without downloading the data to the information processing apparatus (see rejection of claim 69), and

wherein at least one of the above steps is performed by a computer processor (Col. 11 lines 50-51 wherein the virtual printer may be hardware).

Regarding claim 80, Yacoub discloses an information processing method according to claim 79, wherein the function information obtained in the obtaining step includes information indicating a job attribute range executable by the peripheral, and wherein the method distinguishably displays on a display unit the job attribute range on the user [interface] (see rejection of claim 70).

Regarding claim 81, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining information indicating a function setting range executable by the peripheral (see rejection of claim 71).

Regarding claim 83, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining information indicating a function selectable in the peripheral (see rejection of claim 73).

Regarding claim 85, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining from the peripheral an attribute list indicating functions corresponding to one of a physical device control program, a logical device control program, a resource control program of the peripheral and a coordinate control program for coordination thereof (see rejection of claim 75).

Regarding claim 86, Yacoub discloses an information processing method according to Claim 85, wherein the physical device control program includes at least one of a scanner control

program that controls a scanner engine of the peripheral, a laser beam printer control program that controls a laser beam printer engine of the peripheral, and an ink jet printer control program that controls an ink jet printer engine of the peripheral (see rejection of claim 76).

Regarding claim 87, Yacoub discloses an information processing method according to Claim 85, wherein the logical device control program includes at least one of a print job control program that controls a laser beam printer control program, a print job control program that controls an ink jet printer control program, a print job control program that controls the laser beam printer control program and the ink jet printer control program, a scan job control program that controls a scanner control program, a copy job control program that controls the scanner control program and the laser beam printer control program, and a copy job control program that controls the scanner control program and the ink jet printer control program (see rejection of claim 77).

Regarding claim 88, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining the function information from the peripheral (see rejection of claim 78).

Regarding claim 89, Yacoub discloses a computer-readable storage medium, storing, in executable form, a program for causing an information processing apparatus to control via a communication medium a peripheral that processes a job, which executes a predetermined service, the program comprising:

obtaining code, displaying code, issuance code and inhibiting code for implementing the method as described and rejected in claim 79 above (Col. 11 lines 16-19 wherein the virtual printer can be a combination of software and hardware which reads on a storage medium storing the program to implement the method as rejected in claim 79 above).

4. Claims 72, 82, 90 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub in view of Aiello, Jr. et al as applied to claim 69 above, and further in view of Koichi Murakami (EP 0529692 A2).

Regarding claim 72, Yacoub discloses an information processing apparatus according to claim 71 further comprising:

a determination unit (see rejection of claim 69; virtual printer 610) adapted to determine whether an inhibition attribute is set for the job (see rejection of claim 69 wherein acquiring the capabilities of the printer gives the attributes not supported by the printer, by default); and wherein the inhibition unit inhibits issuance of the job by the issuance unit (see rejection of claim 69).

Yacoub fails to explicitly disclose a discrimination unit adapted to discriminate whether a combination of attributes set for the job is inhibited, if the determination unit determines that an inhibition attribute is set for the job and inhibiting issuance of the job if the discrimination unit discriminates that a combination of attributes set for the job is inhibited.

Murakami, in the same field of endeavor, teaches a discrimination unit adapted to discriminate whether a combination of attributes set for the job is inhibited if the determination

unit determines that an inhibition attribute is set for the job (Col. 16 lines 36-50 wherein there must exist a "discrimination unit" adapted to determine the stapling capability corresponding to the number of sheets counted when a predetermined number of sheets will inhibit stapling. Stapling capability to number of sheets reads on a "combination of attributes" which would inhibit printing if the count exceeded a predetermined number), and inhibiting issuance of the job if the discrimination unit discriminates that a combination of attributes set for the job is inhibited (Col. 16 lines 47-52 wherein issuance of the job is prohibited when the number of sheets exceeds a predetermined number).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the information processing apparatus as disclosed by Yacoub to utilize the process and accompanying unit as taught by Murakami wherein a discrimination unit adapted to discriminate whether a combination of attributes set for the job is inhibited if the determination unit determines that an inhibition attribute is set for the job and inhibiting issuance of the job if the discrimination unit discriminates that a combination of attributes set for the job is inhibited because the modification to use the discrimination unit as taught by Murakami would have constituted the mere arrangement of prior art elements with each performing the same function it had been known to perform, the combination yielding no more than one would expect from such an arrangement. Clearly utilizing the range of acceptable sheets which would allow stapling as taught by Murakami would have provided the predictable results of sending the predetermined number of sheets required for stapling to be possible, along with additional attributes of the printer, to the determination unit as disclosed by Yacoub to evaluate whether the print job should be issued.

Regarding claim 82, Yacoub discloses an information processing method according to Claim 81, wherein the information indicating the function setting range is expressed with a combination of attributes for which a job setting is inhibited (see rejection of claim 72).

Regarding claim 90, Yacoub discloses an information processing apparatus according to claim 69.

Yacoub fails to disclose wherein value of the first attribute is related to a number of print sheets and the value of the second attribute is related to a finisher device of the peripheral, and wherein the inhibition unit inhibits issuance of the job if the value of the first attribute exceeds a predetermined value.

Murakami, in the same field of endeavor of print job finishing, teaches wherein value of the first attribute is related to a number of print sheets (Col. 16 lines 47-48 wherein the count of the originals is taken) and the value of the second attribute is related to a finisher device of the peripheral (Col. 16 lines 47-48 wherein a setting value for a finisher device has to be determined in order to compare the count of the originals), and wherein the inhibition unit inhibits issuance of the job if the value of the first attribute exceeds a predetermined value (Col. 16 lines 51-52 wherein the job may be prohibited if the count or the originals exceeds the devices finishing capabilities).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the information processing apparatus as disclosed by Yacoub to utilize the obtaining unit for obtaining a number of print sheets and a setting value as to a finisher device of

a peripheral and wherein the issuance of the job is inhibited if the setting value as to the number of print sheets exceeds a predetermined value as taught by Murakami to avoid possible staple jams from stapler being over charged or incurring any other damage to a finishing device due to excessive use.

Regarding claim 91, Yacoub discloses an information processing method according to claim 79, wherein the setting values of a job include a setting value as to a number of print sheets and a setting value as to a finisher device of the peripheral, and wherein the inhibiting step inhibits issuance of the job if the setting value as to the number of print sheets exceeds a predetermined value (see rejection of claim 90).

Response to Arguments

Applicant's arguments with respect to claims 69, 79, 89 and all claims dependent thereon have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMARES WASHINGTON whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/756,773
Art Unit: 2625

Page 18

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

/Jamares Washington/
Examiner, Art Unit 2625

/J. W./
Examiner, Art Unit 2625

August 13, 2010